

The opinion in support of the decision being entered today was **not** written
for publication and is **not** binding precedent of the Board.

Paper No. 38

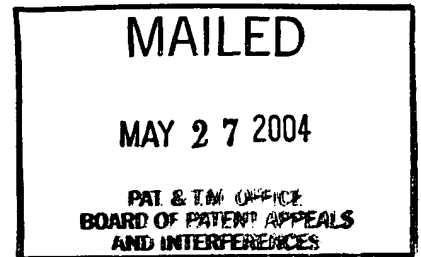
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALGIRDAS A. UNDERYS

Appeal No. 2001-0359
Application No. 08/991,113

ON BRIEF



Before WINTERS, HANLON, and SCHEINER, Administrative Patent Judges.

HANLON, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the final rejection of claims 4, 6, 7, 15 through 17 and 19. Claim 17 was canceled in an amendment filed with appellant's brief. See Paper No. 32. Thus, claims 4, 6, 7, 15, 16 and 19 remain for our consideration in this appeal. Claims 8 and 9 are also pending in the application but have been objected to as being dependent upon a rejected base claim. In the final Office action, the examiner indicated that claims 8 and 9 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. See Paper No. 27, p. 6.

Background

This appeal is the second appeal in the case. In the first appeal, the sole issue was whether claims 4, 6 through 9 and 15 through 17 were properly rejected under 35 U.S.C. § 112, first paragraph, based on written description.¹ A panel of the Board did not render a decision on the issue. Instead, the application was remanded to the examiner to consider whether to enter an "AMENDMENT" (Paper No. 23) filed by appellant more than one and one-half years after the examiner's answer was mailed. See "REMAND TO THE EXAMINER" (Paper No. 24), p. 5.

The remand set forth three alternative courses of action available upon return of the application to the examiner's jurisdiction. See Paper No. 24, pp. 5-6. Consistent with the first alternative, the examiner entered the "AMENDMENT" and apparently withdrew the rejection under 35 U.S.C. § 112, first paragraph. See Paper No. 25, p. 2, paragraph no. 1; see also Brief, (Paper No. 31), p. 2. However, rather than passing the application to issue, the examiner reopened prosecution and in a non-final Office action, rejected claims 4, 6 through 9, 15 through 17 and 19 based on nonstatutory double patenting. See Paper No. 25. In a final Office action, the examiner continued to reject claims 4, 6, 7, 15 through 17 and 19 based on nonstatutory double patenting but objected to claims 8 and 9 as being dependent upon a rejected base claim. See Paper No. 27. This appeal followed.

¹Claim 19 was also pending but was allowed by the examiner. See Paper Nos. 9 and 10.

Rejections on appeal

The following rejections are before the panel in this appeal:²

(1) Claims 6, 7, 15 and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,398,885 ("the '885 patent").³

(2) Claim 4 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,398,885 in view of either McGinty⁴ or Heath.⁵

(3) Claim 19 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,398,885 in view of McGinty.

²The final Office action and the examiner's answer indicate that claims 4, 6, 7, 15, 16 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,398,885, either alone or in combination with other prior art. However, U.S. Patent No. 6,398,885 only has 10 claims. The statement of each rejection on appeal has been corrected accordingly.

³U.S. Patent No. 6,398,885 was granted on June 4, 2002 to Charles W. Finkl and Algirdas A. Underys and is assigned to A. Finkl & Sons Co., Chicago, Illinois.

⁴U.S. Patent No. 4,540,876 granted September 10, 1985.

⁵U.S. Patent No. 4,620,884 granted November 4, 1986.

Grouping of claims

According to appellant, claims 6, 7, 15 and 16 stand or fall together. See Brief, p. 4. Therefore, for purposes of this appeal, claims 6, 7 and 16 stand or fall with the patentability of claim 15. See 37 CFR § 1.192(c)(7) (2002). Furthermore, the patentability of each of claims 4 and 19 stands alone. See In re McDaniel, 293 F.3d 1379, 1384, 63 USPQ2d 1462, 1466 (Fed. Cir. 2002) (applicant has the right to have each contested ground of rejection reviewed and measured against the scope of at least one claim within the group of claims subject to that ground of rejection).

Discussion

I.

Nonstatutory double patenting rejections may be based on either a one-way or a two-way determination of obviousness. In this case, the examiner applied a one-way determination of obviousness in the double patenting rejections on appeal. However, appellant argues that the relationship between the instant application and the '885 patent requires a two-way determination of obviousness. As a preliminary matter, this panel must decide whether the examiner was correct in applying the one-way test.

The instant application was filed before the application which matured into the '885 patent. See Answer (Paper No. 35), p. 5 (the present application should be considered the "earlier filed" application and the application which matured into the '885 patent the "later filed" application for purposes of determining whether one-way or two-way obviousness need be shown in making an

obviousness-type double patenting rejection). Appellant further describes the relationship between the claims of the instant application and the claims of the '885 patent as broad to specific. See Brief, pp. 7-8.

Appellant insists that he is unaware of any authority which supports the rejection of broad claims in an earlier filed application based on specific claims in a later filed application. Rather, relying on In re Stanley, 214 F.2d 151, 102 USPQ 234 (CCPA 1954), In re Borah, 354 F.2d 1009, 148 USPQ 213 (CCPA 1966), and In re Braat, 937 F.2d 589, 19 USPQ2d 1289 (Fed. Cir. 1991), appellant argues that a later filed specific application which matures into a patent before an earlier filed broad application cannot be the basis for rejecting the claims of the earlier filed application. See Brief, p. 8; Reply brief (Paper No. 36), p. 2. Appellant urges the following excerpt from Braat, 937 F.2d at 593, 19 USPQ2d at 1292 is controlling in this appeal:⁶

[W]hen a later filed improvement patent issues before an earlier filed basic invention, a double patenting rejection is only proper against the claims to the basic invention if the improvement is not patentably distinct from the basic invention. The rationale behind this proposition is that an applicant (or applicants), who files applications for basic and improvement patents should not be penalized by the rate of progress of the application through the PTO, a matter over which the applicant does not have complete control. . . . In this situation, the order of issuance is, in effect, ignored, and the relevant determination becomes whether the improvement is patentably distinct from the generic invention.

⁶In its reply brief, appellant incorrectly states that the following quotation appears in the Court's decision in Borah. See Reply brief, p. 2.

However, several years after Braat, the Court elaborated on the circumstances under which a two-way determination of obviousness would be appropriate. Specifically, in In re Berg, 140 F.3d 1428, 1432, 46 USPQ2d 1226, 1229 (Fed. Cir. 1998), the Court explained:

Generally, a "one-way" test has been applied to determine obviousness-type double patenting. Under that test, the examiner asks whether the application claims are obvious over the patent claims. In a recent case, with unusual circumstances, however, this court instead applied a "two-way" test. See Braat, 937 F.2d at 592, 19 USPQ2d at 1291-92. Under the two-way test, the examiner also asks whether the patent claims are obvious over the application claims. If not, the application claims later may be allowed. Thus, when the two-way test applies, some claims may be allowed that would have been rejected under the one-way test. One of our predecessor courts, the Court of Customs and Patent Appeals, also at various times applied an analysis similar to that used in Braat to determine obviousness-type double patenting. See In re Borah, 345 F.2d 1009, 1009, 148 USPQ 213, 214 (CCPA 1966)[⁷] The essential concern was to prevent rejections for obviousness-type double patenting when the applicants filed first for a basic invention and later for an improvement, but, through no fault of the applicants, the PTO decided the applications in reverse order of filing, rejecting the basic application although it would have been allowed if the applications had been decided in the order of their filing.

* * * * *

. . . . Since Braat, many patent applicants facing an obviousness-type double patenting rejection under the one-way test have argued that they actually are entitled to the two-way test. The two-way test, however, is a narrow exception to the general rule of the one-way test. . . . Nevertheless, the notion survives that in certain unusual circumstances, the applicant should receive the benefit of the two-way test. The question then is: when?

⁷Similarly, in In re Stanley, 214 F.2d 151, 102 USPQ 234 (CCPA 1954), the Court sanctioned the issuance of a dominating patent to the owner of an improvement patent which had previously issued, notwithstanding the fact that the owner's protection would be extended beyond the expiration of the improvement patent by several years. See Borah, 354 F.2d at 1017, 148 USPQ at 220 (discussing the Court's decision in Stanley).

According to the Court in Berg, 140 F.3d at 1435, 46 USPQ2d at 1232:

The two-way exception can only apply when the applicant could not avoid separate filings, and even then, only if the PTO controlled the rates of prosecution to cause the later filed species claims to issue before the claims for a genus in an earlier application.

Assuming arguendo that appellant could not have avoided separate filings, a review of the record by this panel reveals that the USPTO did not "control the rates of prosecution" of the instant application and the application which matured into the '885 patent to cause the claims of the '885 patent to issue before the claims of the instant application.⁸ To the contrary, it appears that any delay in the prosecution of the instant application is attributable to appellant.

First, appellant failed to file a timely and proper reply to the Office action mailed on May 27, 1999, causing the instant application to become abandoned. See Answer, pp. 5-6; Paper No. 16. Appellant argues the delay was unintentional. See Reply brief, p. 7. However, regardless of whether the delay was unintentional, appellant's conduct, not the conduct of the USPTO, caused a delay in the prosecution of the instant application.

⁸According to MPEP § 804(II)(B)(1)(b) (8th ed., Rev. 1, Feb. 2003):

Unless the record clearly shows administrative delay by the Office and that applicant could not have avoided filing separate applications, the examiner may use the one-way obviousness determination and shift the burden to applicant to show why a two-way obviousness determination is required.

See Litton Sys., Inc. v. Whirlpool Corp., 728 F.2d 1423, 1439, 221 USPQ 97, 107 (Fed. Cir. 1984) ("The MPEP has no binding force on us, but is entitled to notice, so far as it is an official interpretation of statutes or regulations with which it is not in conflict.").

Second, appellant filed an amendment (Paper No. 23) obviating the sole grounds of rejection in the previous appeal more than one and one-half (1½) years after the examiner's answer was mailed and three (3) months after a Notice of Allowability was mailed in the application which matured into the '885 patent. As explained by the examiner (Answer, p. 6):

[T]he Amendment filed by Appellant in March 2002 (Paper no. 23) successfully removed all grounds of rejection pending at that time, leaving only obviousness-type double patenting rejections to be made.⁹ Had this amendment been filed at any time prior to a Notice of Allowability in the September 1998 application which matured into the '885 patent, no grounds of rejection would have been remaining and the present claims would have issued. The Notice of Allowability in the '885 patent was issued in December 2001. Thus, if Appellant had submitted the Amendment of March 2002 at any time during the nearly two-year period between December 1999 (when the original Notice of Appeal was filed in the present application) and December 2001 (when a Notice of Allowability was issued in the "later-filed" application), no double patenting issue would have been raised, and no rejections would have been pending with respect to the appealed claims. [Emphasis in original.]

According to the examiner (Answer, p. 6):

- 1) No reasonable case can be made for administrative delay in the present application.
- 2) In the absence of Appellant's delay, no grounds of rejection would be applicable to the appealed claims.

⁹Appellant argues that the amendment filed in March 2002 (Paper No. 23) was misplaced by the USPTO. See Reply brief, p. 6. According to the official file of Application 08/991,113 maintained by the USPTO, appellant filed the amendment by fax on March 4, 2002. The first page of the amendment bears the following stamps: "FAX RECEIVED MAR 4 2002 GROUP 1700" and "RECEIVED 2002 MAR -8 AM 8:36 BOARD OF PATENT APPEALS AND INTERFERENCES." The amendment was placed in the official file of Application 08/991,113 on March 8, 2002, and entered by the examiner on August 1, 2002, when the application was returned to the examiner's jurisdiction. Therefore, contrary to appellant's argument, the record does not reflect that the amendment was misplaced by the USPTO.

3) The proper standard for determining obviousness of the appealed claims vis-à-vis the '885 claims is a one-way test, i.e. would the invention as defined in the appealed claims have been obvious in view of that defined in the '885 claims. [Emphasis in original.]

Appellant argues that the examiner could have made a provisional double patenting rejection based on the claims of the '885 patent as early as March 19, 1999, because "all the relevant words and phrases in the appealed claims which could possibly be implicated in a double patenting context were before the Office since at least March 19, 1999." In the alternative, appellant argues that the examiner should have made a provisional double patenting rejection during the three month period between March 4, 2002, when the amendment was filed, and June 4, 2002, when the '885 patent issued. See Reply brief, pp. 6-7.

Appellant's arguments are untenable. Claim 1 in the '885 patent was amended to its final form in an examiner's amendment mailed on November 30, 2001, and claims 2 through 10 were added in a "Rule 312 Amendment" on February 19, 2002. See Application 09/160,895, Paper Nos. 15 and 17. In November 2001, the Board already had jurisdiction over the instant application. Furthermore, the application was not remanded to the jurisdiction of the examiner until July 18, 2002, more than one month after the '885 patent issued. Therefore, contrary to appellant's arguments, the examiner could not have made a provisional obviousness-type double patenting rejection based on claims 1-10 of the '885 patent during the prosecution of the instant application.

For the reasons set forth above, the record does not establish that the USPTO "controlled the rates of prosecution" to cause the claims in the '885 patent to issue before the claims in the instant application. Therefore, the examiner was correct to apply the one-way test in the double patenting rejections on appeal.¹⁰

II.

Claims 6, 7, 15 and 16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of the '885 patent.

Claim 15 reads as follows:¹¹

15. In a method of heat treating rod, bar and block tool steel workpieces the steps of
 providing a heat treatment furnace of a size suitable to receive such a tool steel workpiece to be heat treated,
 providing a heat source in the interior of the furnace consisting of a source of infrared heat energy,
 subjecting the tool steel workpiece to heat treatment by exposing said tool steel workpiece to infrared heat energy from the infrared heat energy source and
 maintaining said tool steel workpiece stationary during subjection of the workpiece to heat treatment from the infrared energy source.

¹⁰Because the evidence fails to establish that the USPTO controlled the rates of prosecution to cause the claims in the '885 patent to issue before the claims in the instant application, it is not necessary to decide whether appellant could have avoided separate filings. Berg, 140 F.3d at 1435, 46 USPQ2d at 1232.

¹¹Claim 15 as it appears in an attachment to the Brief contains an error. A corrected copy of claim 15 has been reproduced in this Decision on Appeal.

The examiner sets forth the prima facie case of unpatentability as follows (Answer, p. 3):

Although [claims 6, 7, 15 and 16 in the instant application and claims 1-10 in the '885 patent] are not identical, they are not patentably distinct from each other because both the '885 claims and the present claims are drawn to methods for treating tool steel blocks by placing same in a mounting apparatus subjected to the effects of infrared radiation, preferably from a tungsten halogen lamp (see '885 claim 6), and in an ambient atmosphere (see the "subjecting" step of '885 claim 1). The difference between the instant claims and the '885 claims is that the '885 claims recite a number of limitations which are not recited in the instant claims. However, none of these limitations are inconsistent with the presently claimed process, and it appears that if one carries out any process as defined in the '885 claims, then one necessarily also carries out a process as defined by the present claims.

Consequently, no patentable distinction is seen between the presently claimed process and that of the '885 patent.

See In re Lukach, 442 F.2d 967, 970, 169 USPQ 795, 797 (CCPA 1971) (the description of a single embodiment of broadly claimed subject matter constitutes a description of the invention for anticipation purposes); see also In re Baxter Travenol Labs, 952 F.2d 388, 391, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991) (anticipation is the epitome of obviousness)..

Appellant argues that the method of claim 15 and the method claimed in the '885 patent are patentably distinct for several reasons. First, appellant argues that the method claimed in the '885 patent only treats a portion of a die block to produce two zones of hardness whereas the method of claim 15 treats entire rods, bars and blocks. See Brief, pp. 11-13 and 16. Appellant argues that the limitation "providing a heat treatment furnace of a size suitable to receive such a tool steel workpiece to be heat treated" in claim 15 is evidence that the claimed method is limited to treating an entire block. See Brief, p. 14.

Appellant's arguments are not persuasive. The method claimed in the '885 patent is directed to treating a portion of a tool steel block. The block has a working side and a mounting side. According to the claimed method, the mounting side of the block is treated to a depth of two inches by subjecting it to an electrical source of heat. See the "treating" step in claim 1 of the '885 patent. The heat source may be an infrared heating means which operates in a cold wall furnace. See claims 5 and 9 of the '885 patent. Thus, the method treats a tool steel block, albeit one side of the block, using infrared heat energy.

Appellant's claim 15 is directed to a method of heat treating rod, bar and block tool steel workpieces. According to the claimed method, a tool steel block is heat treated by exposing the block to infrared heat energy from an infrared heat energy source provided in the interior of a heat treatment furnace. Claim 15 does not expressly state that the method is limited to treating "entire" blocks.

Furthermore, one of ordinary skill in the art using the claimed method to treat an "entire" block would have recognized the importance of certain factors such as the location(s) of the infrared heat energy source and the operating parameters of the furnace. However, claim 15 does not limit the location(s) of the energy source or limit the heat treatment furnace to any particular structure or mode of operation. Indeed, appellant does not define the term "heat treatment furnace" in the specification. See Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1818 (Fed. Cir. 2002) ("unless compelled otherwise, a court will give a claim term the full range of its ordinary meaning as understood by persons skilled in the relevant

art"). Claim 15 merely limits the "heat treatment furnace" to "a size suitable to receive such a tool steel workpiece to be heat treated." Appellant has failed to establish that the cold wall furnace used in the method claimed in the '885 patent to treat one side of a tool steel block does not satisfy this limitation.

Appellant attempts to make a further distinction between the method of claim 15 and the method claimed in the '885 patent, arguing that "all but the treated portion of the workpiece" is subject to ambient conditions in the method claimed in the '885 patent. However, "it cannot be said by any stretch of the imagination" that the workpieces are treated in the presence of ambient atmosphere in the method of claim 15. See Brief, p. 15.

Under a one-way determination of patentability, the test is whether the application claims are unpatentable over the patent claims, not vice versa. In this case, claim 15 is silent as to whether a tool steel workpiece or any portion thereof is subject to ambient conditions. Therefore, the fact that a portion of a workpiece is subject to ambient conditions in the method claimed in the '885 patent does not render claim 15 patentable.

Finally, appellant argues that claim 15 is directed to a method of "heat treating" a rod, bar or block and does not specify the starting condition of the rod, bar or block. In contrast, appellant points out that the method claimed in the '885 patent treats a "pre-hardened" die block. Appellant argues that "[a] piece of steel which has been 'pre-hardened' means, to a man skilled in the art, that the piece, after melting and cooling, has been subjected to heat to bring the piece to a desired level of hardness all the way through." However, "to a man skilled in the art, the words

'heat treating' are assumed to mean, unless specifically contradicted, that the steel is in the quenched condition and that heat is being applied to it for the dual purpose of relieving internal quenching stresses and of achieving a desired hardness level." Brief, p. 13.

Significantly, appellant has failed to point to any evidence in the record which supports this argument. See In re Schulze, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965) (arguments in the brief do not take the place of evidence in the record). In any event, appellants acknowledge that claim 15 encompasses "steel in any condition," including a soft stage, a hard stage or some intermediate processing stage. See Brief, pp. 13-14. Therefore, by appellant's own admission, claim 15 includes the "pre-hardened" blocks recited in claim 1 of the '885 patent.

For the reasons set forth above, the decision of the examiner rejecting claim 15 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of the '885 patent is affirmed. Claims 6, 7 and 16 stand or fall with the patentability of claim 15. Therefore, the decision of the examiner rejecting claims 6, 7 and 16 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of the '885 patent is also affirmed.

III.

Claim 4 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of the '885 patent in view of either McGinty or Heath.

Claim 4 reads as follows:

4. The method of claim 15 further characterized by and including the step of providing a coating of reflective material over at least some of the interior surface of the furnace.

The examiner sets forth the prima facie case of obviousness as follows (Answer, p. 4):

The claims of the '885 patent do not recite the reflective surface as recited in instant claim 4. Both McGinty and Heath indicate that it was well-known in the art at the time of the invention to employ reflective surfaces in infrared treatment furnaces; see McGinty claim 1, lines 2-4 or Heath column 4, lines 1-5. These disclosures would have rendered it obvious to one of ordinary skill in the art to utilize the presently claimed reflective surfaces when performing the process according to the '885 claims.

Appellant argues that McGinty and Heath are from arts which are not analogous to the claimed invention. See Brief, p. 19.

We disagree. The Court in In re Wood, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979), set forth the following test for determining whether a reference is from an analogous art:

First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved.

The invention disclosed in McGinty relates to a heat treatment furnace. See McGinty, col. 1, lines 5-7. The furnace comprises six plane reflecting walls defining a rectangular chamber for receiving a body to be heated and a plurality of mutually parallel elongated heat radiation lamps. See McGinty, col. 2, lines 14-18. The walls are made of polished stainless steel and have gold-plated inwardly-directed faces which reflect infrared radiation. See McGinty, col. 3, lines

36-38. According to McGinty, a furnace in accordance with the disclosed invention is able to provide not only very rapid but also extremely uniform heating, even at high temperatures. See McGinty, col. 2, lines 37-42.

Similarly, Heath discloses a process and apparatus for heat treating a metal strap-like material using high intensity infrared radiation. See Heath, col. 1, lines 10-21. According to the disclosed process, the metal to be treated passes through a heat zone comprising opposed banks of high intensity infrared radiation lamps. See Heath, col. 3, lines 3-8 and lines 62-65. Each side wall of the heat zone has a plurality of infrared reflecting panels which reflect infrared radiation emitted by the lamps to heat the metal being treated. See Heath, col. 4, lines 2-5 and 49-53.

Appellant has not defined his field of endeavor in the brief. Nevertheless, McGinty, as well as Heath, are reasonably pertinent to the particular problem with which appellant is involved, i.e., heat treating an article using an infrared heat source. Therefore, McGinty and Heath are from arts analogous to the claimed invention. See In re Gorman, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (in resolving the question of obviousness under 35 U.S.C. § 103, it is proper to consider references in an analogous art, that is, an art reasonably pertinent to the problem with which the inventor is concerned).

Appellant further argues that combining the teachings of McGinty or Heath with the invention claimed in the '885 patent would destroy the claimed invention because the method claimed in the '885 patent produces a product having non-uniform properties whereas McGinty and Heath teach applying heat to achieve uniform properties. See Brief, p. 20.

One cannot show nonobviousness by attacking the references individually as appellant has done. The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Therefore, it is of no moment that McGinty and Heath teach applying heat to achieve uniform properties. The examiner merely relied on McGinty and Heath to establish that it is well known in the art to employ reflective surfaces as in claim 4 in infrared heat treatment furnaces to effectively direct infrared heat to the article being treated.

For the reasons set forth above, the decision of the examiner rejecting claim 4 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of the '885 patent in view of either McGinty or Heath is affirmed.

IV.

Claim 19 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of the '885 patent in view of McGinty.

Claim 19 reads as follows:

19. In a method of heat treating a tool steel workpiece the steps of
providing a heat source in the interior of a furnace of a size suitable to
receive a tool steel workpiece to be heat treated,
providing a coating of reflective material selected from the group
consisting of gold, silver and aluminum over at least some of the interior surface of
the furnace, and
subjecting the tool steel workpiece to heat treatment by exposing said tool
steel workpiece to infrared heat energy from an infrared heat energy source.

The examiner sets forth the prima facie case of obviousness as follows (Answer, pp. 4-5):

The '885 claims define a process which includes heat treating a tool steel workpiece by the effects of a source of infrared energy, but do not recite the specific reflective material as set forth in the instant claim. McGinty column 3, lines 36-38 indicate that it was conventional in the art at the time of the invention to employ gold plated reflective walls in infrared heat treatment processes. Consequently, to use such a surface in the process as defined by the '885 claims would have been considered an obvious expedient by one of ordinary skill in the art.

Appellant argues that the invention of claim 19 and the invention claimed in the '885 patent are patentably distinct for several reasons. First, appellant argues that the method claimed in the '885 patent only treats a portion of a workpiece to produce two zones of hardness whereas the method of claim 19 treats an entire workpiece. See Brief, pp. 17-18.

Appellant's argument is not persuasive. The method claimed in the '885 patent treats a tool steel block, albeit one side of the block, using infrared heat energy in a cold wall furnace. Similarly, the method of appellant's claim 19 heat treats a tool steel workpiece by exposing the workpiece to infrared heat energy from an infrared heat energy source. See the "subjecting" step in appellant's claim 19. Claim 19 does not expressly state that the method is limited to treating "entire" workpieces.

Appellant argues that the claim limits the furnace to "a size suitable to receive a tool steel workpiece to be heat treated" and is evidence that the claimed method is limited to treating an entire block. See Brief, p. 17, section labeled "C." (incorporating the arguments from section labeled "III.C." on page 14 of the brief). We disagree. Claim 19 does not even require the

infrared heat energy source to be located in the furnace. Compare the first "providing" step in claim 19 ("providing a heat source in the interior of a furnace" (emphasis added)) with the "subjecting" step in claim 19 ("subjecting the tool steel workpiece to heat treatment by exposing said tool steel workpiece to infrared heat energy from an infrared heat energy source" (emphasis added)).

Second, appellant argues that the workpiece treated in the method claimed in the '885 patent is subject to an ambient atmosphere. However, the workpiece treated in the method of claim 19 is not exposed to an ambient atmosphere apparently because the workpiece is treated in a "conventional furnace." See Brief, p. 18.

Under a one-way determination of patentability, the test is whether the application claims are unpatentable over the patent claims, not vice versa. In this case, claim 19 is silent as to whether a tool steel workpiece or any portion thereof is exposed to ambient conditions. Therefore, the fact that a portion of a workpiece is subject to ambient conditions in the method claimed in the '885 patent does not render claim 19 patentable.

Finally, appellant argues that the workpiece in claim 19 is in a "non-final" condition prior to treatment whereas the workpiece in the method claimed in the '885 patent has been "pre-hardened." See Brief, p. 17. To the contrary, claim 19 does not specify the starting condition of the workpiece. Compare Brief, p. 13 (recognizing that appellant's claim 15 does not specify the condition of the workpiece prior to treatment). Therefore, claim 19 includes the "pre-hardened" workpiece recited in the claims of the '885 patent.

Appellant further argues that McGinty is from an art which is not analogous to the claimed invention. See Brief, p. 19.

As explained above, McGinty is reasonably pertinent to the particular problem with which appellant is involved, i.e., heat treating an article using an infrared heat source. Therefore, McGinty is from an art analogous to the claimed invention. Wood, 599 F.2d at 1036, 202 USPQ at 174.

Appellant also argues that combining the teachings of McGinty with the invention claimed in the '885 patent would destroy the claimed invention because the method claimed in the '885 patent produces a product having non-uniform properties whereas McGinty teaches applying heat to achieve uniform properties. See Brief, p. 20.

We disagree. The examiner merely relied on McGinty to establish that it is well known in the art to employ gold plated reflective surfaces as in claim 19 in infrared heat treatment furnaces to effectively direct infrared heat to the article being treated. See Keller, 642 F.2d at 425, 208 USPQ at 881 (the test for obviousness is not what the individual references teach but what the combined teachings of the references would have suggested to one having ordinary skill in the art).

For the reasons set forth above, the decision of the examiner rejecting claim 19 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of the '885 patent in view of McGinty is affirmed.

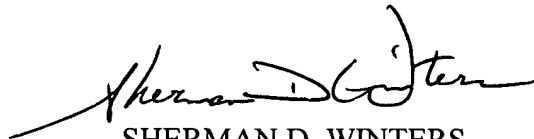
Appeal No. 2001-0359
Application No. 08/991,113

Conclusion

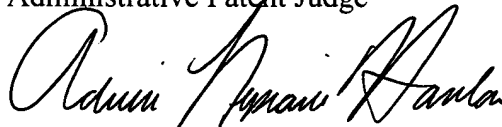
The decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED



SHERMAN D. WINTERS
Administrative Patent Judge



ADRIENE LEPIANE HANLON
Administrative Patent Judge



TONI R. SCHEINER
Administrative Patent Judge

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) BOARD OF PATENT
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) AND
) INTERFERENCES
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Appeal No. 2001-0359
Application No. 08/991,113

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